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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,417	02/06/2004	Seok-il Yoon	Q79285	2057

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EXAMINER

MAHONEY, CHRISTOPHER E

ART UNIT PAPER NUMBER

2851

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/772,417

Applicant(s)

YOON ET AL.

Examiner

Christopher E. Mahoney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>Feb 6, 2004</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the horizontal cylindrical lenses comprising a non-spherical face and a flat exit face (see claim 3 for example) and the vertical cylindrical lenses comprising a non spherical entrance face (see claim 9 for example) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 3, 6, 8, 9, 10, 19, 22, 24, 25 and 26 are objected to because of the following informalities: It is unclear what the applicant means by non-spherical in the above identified claims. If the lenses are cylindrical, then they could be spherical, if they are flat then they are not cylindrical. It is not clear what the applicant contemplates by the term spherical especially when in the context of claiming a cylindrical lens. Alternatively, a cylinder is cylindrical (i.e. extending in one direction) and not spherical round in all directions). Since it is unclear which definitions the applicant is relying on, both will be used for prior art purposes. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5-11, 15-18, 21-27, and 31-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Takuma (U.S. Patent No. 5,615,045). Takuma teaches a screen for a projection television (figure 1) comprising: a first lens for converting incident light into near-parallel light (Fresnel lens 15); a second lens comprising a horizontal array of vertical cylindrical lenses for

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horizontally emitting light (lenticular lens sheet 14), in which vertical stripes (22) absorbing visible light are formed in parallel on connection portions for the vertical cylindrical lenses; and a light diffusion film (lenticular lens sheet 23) comprising a vertical array of horizontal cylindrical lenses for vertically emitting light, in which horizontal stripes (22) absorbing visible light are formed in parallel on connection portions for the horizontal cylindrical lenses. The light absorbing portions are in flat portions which constitute a flat, non-spherical face. The second lens comprises a light diffusing agent (21). The light diffusion film may be disposed between the first lens and the second lens (figures 4, 9A, 9B) or the second lens may be disposed between the first lens and the light diffusing film (figures 10A and 10B). The applicant is directed to review figures 3A, 3B, 4, 9A, 9B, 10A, and 10B. As can be seen in the figures, the exit face lens portions comprise lenses with a smaller radius than the entrance face lens portions.

Claims 1-3, 5-6, 15, 17-19, 21-22, 31, and 33-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogino (U.S. Patent No. Re33,795). Ogino teaches a screen for a projection television (figures 1-3) comprising: a first lens for converting incident light into near-parallel light (Fresnel lens 4); a second lens comprising a horizontal array of vertical cylindrical lenses for horizontally emitting light (lenticular lens sheet 19), in which vertical stripes (14) absorbing visible light are formed in parallel on connection portions for the vertical cylindrical lenses; and a light diffusion film (lenticular lens sheet 8') comprising a vertical array of horizontal cylindrical lenses for vertically emitting light, in which horizontal stripes (17) absorbing visible light are formed in parallel on connection portions for the horizontal cylindrical lenses. The second lens comprises a light diffusing agent (col. 11, lines 55-56). The applicant is directed to review figures 1-3 and 15.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-13 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takuma (U.S. Patent No. 5,615,045) in view of Chang (U.S. Patent No. 6,862,139). Takuma teaches the salient features of the claimed invention except for an anti reflective protective filter. Chang teaches in col. 5, lines 3-13 that it was known to provide an anti reflective protective film on the outermost portion of a projection screen. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Chang for the purpose of protecting the screen from damage and reducing glare.

Claims 14 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takuma (U.S. Patent No. 5,615,045) in view of Chang (U.S. Patent No. 6,862,139) and further in view of Goto (U.S. Patent No. 6,822,792). Takuma in view of Chang teaches the salient features of the claimed invention except for stating that the protective filter is laminated. Goto teaches in col. 23, lines 1-11 that it was known to provide protective sheets by laminating. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Goto for the purpose of utilizing readily available manufacturing process.

Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takuma (U.S. Patent No. 5,615,045) in view of Chang (U.S. Patent No. 6,862,139). Takuma teaches the salient features of the claimed invention except for making the film of PET or PC. Chang

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teaches in col. 5, lines 58-62 that it was known to provide utilize PC (and PET as PETG) when manufacturing a projection screen. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize PC (and PET as PETG), for the purpose of utilizing readily available materials. The applicant should note that it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claims 12-13 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino (U.S. Patent No. Re33,795) in view of Chang (U.S. Patent No. 6,862,139). Ogino teaches the salient features of the claimed invention except for an anti reflective protective filter. Chang teaches in col. 5, lines 3-13 that it was known to provide an anti reflective protective film on the outermost portion of a projection screen. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Chang for the purpose of protecting the screen from damage and reducing glare.

Claims 14 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino (U.S. Patent No. Re33,795) in view of Chang (U.S. Patent No. 6,862,139) and further in view of Goto (U.S. Patent No. 6,822,792). Ogino in view of Chang teaches the salient features of the claimed invention except for stating that the protective filter is laminated. Goto teaches in col. 23, lines 1-11 that it was known to provide protective sheets by laminating. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Goto for the purpose of utilizing readily available manufacturing process.

Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino (U.S. Patent No. Re33,795) in view of Chang (U.S. Patent No. 6,862,139). Ogino teaches the

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salient features of the claimed invention except for making the film of PET or PC. Chang teaches in col. 5, lines 58-62 that it was known to provide utilize PC (and PET as PETG) when manufacturing a projection screen. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize PC (and PET as PETG), for the purpose of utilizing readily available materials. The applicant should note that it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Mahoney whose telephone number is (571) 272-2122. The examiner can normally be reached on 8:30AM-5PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'C. Mahoney', is positioned above the printed name.

Christopher E Mahoney  
Primary Examiner  
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